

Jin MURATA\*: *Arisaema aprile* (Araceae), a new  
species from Honshu, Japan\*\*

邑田 仁\*: テンナンショウ属の1新種オドリコテンナンショウ

In April 1979, Mr. Kenji Midorikawa brought the author living specimens of a strange *Arisaema* from Amagitooge, Shizuoka Prefecture. As a result of the field observation as well as morphological and cytological studies, it is described here as a new species.

*Arisaema aprile* J. Murata, sp. nov. (Fig. 1)

Tuber depresso-globosum 2-5 cm diametro. Cataphylla 3-4, superiora membranacea tubulosa 12-20 cm longa. Folia 2 subaequalia; vagina carnosa tubulosa 10-17 cm longa, ore leviter recurvato membranaceo undulato; petiolus 5-12 cm longus; lamina viridia 5-pedati-foliolata, foliolis ovatis vel ellipticis-angustae-ellipticis, apice acutis basi cuneatis, margine integris-serratis vel dentatis, foliolo mediano 5-15 cm longo 2-7 cm lato, petiolulato, foliolis exterioribus minoribus. Pedunculus 7-10 cm longus. Spatha uniformiter flavovirens, plerumque albo-striata; tubus obconoideus 3-5 cm longus 10-15 mm diametro, 3-3.5 cm in statu explanato, ore leviter explanato; lamina ovata declinata 4.5-9 cm longa 2.3-5 cm lata, ad apicem acuminato-attenuata. Spadix dioecius conoideus 1-2 cm longus; florae ♂ brevi-stipitatae, 2-4 andrae; pistilla obpyriformia, ovulis 6-9; appendix flavovirens cylindrica, leviter clavata, basi truncata, brevi-stipitata, 2.5-5.5 cm longa, 4-8 mm diametro.

Type. J. Murata 11859, Japan, Honshu: Shizuoka Pref., Amagiyugashimamachi, Mts. Amagisan, Amagitooge, alt. 830 m, (cult. in Botanical Gardens, University of Tokyo), 1 Apr. 1982.

Specimens examined. Central Japan, Shizuoka Pref.: Amagiyugashimamachi, Mts. Amagisan, Amagitooge; alt. 800 m, 7 Apr. 1979, K. Midorikawa (KYO, TI, TUS); alt. 830 m, 6 Jul. 1981, J. Murata 11352-a-c (3 sheets); ibid. cult. in Bot. Gard. Univ. Tokyo, 1 Apr. 1982, J. Murata 11860 & 11861; 750 m, 16 Apr. 1979, J. Murata et al. 7212; (Shuzenji-machi), upper part of Mt.

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Darumayama, 30 Apr. 1947, T. Yamazaki. Specimens cited without indication are all preserved in TI.

Distribution. Central Japan, Shizuoka Pref., Izu peninsula.

Japanese name. Odoriko-tennansho.

Chromosome number.  $2n=28$  (Fig. 2. Voucher specimen: J. Murata et al. 7212).

*Arisaema aprile* is characterized by 1) short pseudostem as long as



Fig. 1. *Arisaema aprile* J. Murata in Amagitooge, alt. 750 m, 16 Apr. 1979.

peduncle and petioles, 2) pedately 5-sected leaf lamina with rachis not well developed between leaflets, 3) inflorescence appearing and opening before leaves, and 4) mouth of pseudostem loosely embracing the peduncle and narrowly recurving into undulating membranous collar. The characters 1)~3) indicate that the species is closely allied to those enumerated as the *A. nikoense* group by Serizawa (1981), i.e. *A. nikoense* Nakai, *A. kuratae* Serizawa and *A. ogatae* Koidz. *A. aprile* and *A. ogatae* have the character 4) in common (Fig. 3), by which they can be easily distinguished from the other two species whose mouth of pseudostem is tightly enclosing the peduncle and not recurving. In the shape of inflorescence, *A. aprile* with ovate spathe-blade which is clearly longer than the spathe-tube and relatively clavate spadix-appendage is distinguished from *A. ogatae* with broadly ovate spathe-blade which is clearly shorter than the spathe-tube and cylindric spadix-appendage. In general appearance, except the shape of the mouth of pseudostem, *A. aprile* is most similar to *A. nikoense*, but it is smaller in size and has more developed rachis between leaflets as well as a spathe blade narrower at the base than *A. nikoense*.

Ecologically all the species mentioned above are growing under deciduous forests in *Fagus* zone but it is very characteristic that *A. aprile* appears and

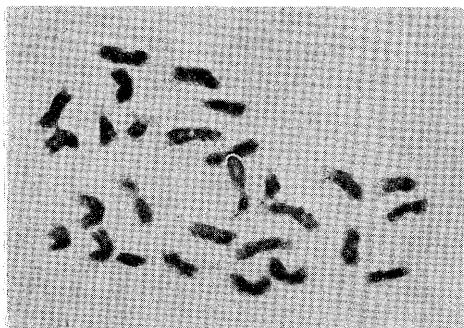


Fig. 2. Somatic chromosomes of *A. aprile*,  $\times 1250$ .

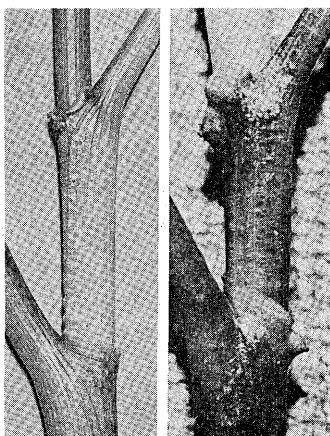


Fig. 3. Upper part of pseudostem showing the shape of its mouth. left. *A. aprile* (J. Murata 11352-b),  $\times 1$ . right. *A. ogatae* (J. Murata, 9 May 1980),  $\times 2$ .

flowers in April, almost one month earlier than its allied species.

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#### Reference

Serizawa, S. 1981. Studies on the genus *Arisaema* in Japan (3). Group of *Arisaema nikoense*. Journ. Jap. Bot. 56: 90-96.

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1979年4月に、伊豆、天城峠付近で緑川謙二氏により採集されたテンナンショウ属植物について分類学的に検討した。その結果これを新種と認めたので *Arisaema aprile* J. Murata (オドリコテンナンショウ) と命名し記載する。和名は、本種が伊豆半島の天城山より北側に分布することにより、「伊豆の踊子」にちなんでつけた。オドリコテンナンショウは 1) 偽茎がやや短く花梗や葉柄とほぼ等長であり、2) 葉身が鳥足状に5小葉に分裂し、側小葉間の軸がやや発達せず、3) 花序が葉よりも早く展開し、4) 偽茎の開口部が反曲して膜状となり波うつ (Fig. 3) という特徴をもつ。特徴 1)~3) により本種は芹沢 (1981) のいうユモトマムシグサ群に属すると考えられる。ユモトマムシグサ群のうちで本種は、特徴 4) を備える点でツクシテンナンショウと共通であり (Fig. 3), 偽茎の開口部が花梗に密着するその他の種類から明らかに区別できる。ツクシテンナンショウは仏炎苞の舷部が広卵形で鋭頭またはやや鈍頭となり筒部より明らかに短く、付属体が円柱状であるのに対して、本種は仏炎苞の舷部が卵形で鋭尖頭となり時にやや突出し筒部より明らかに長く、付属体がやや棍棒状となる点で区別できる。

生態的にはユモトマムシグサ群の他の種類と同じくブナ帯の落葉樹林下に生育するが、開花期が他の種類より約1ヶ月早いことは本種の特徴で、4月初めから開花はじめる。

本種の発見により伊豆半島にはオオミネテンナンショウ、アマギテンナンショウ、オドリコテンナンショウという、ユモトマムシグサ群の3種類を産することが明らかとなつた。なお芹沢 (1981) は「典型的でない」ユモトマムシグサが天城山に産するとしているが、その実体については詳しく述べておらず、狭義のユモトマムシグサが伊豆半島に分布するかどうかは今後検討する必要がある。